



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** CH146A  
**Use of the preparation** Inkjet printing.  
**Version #** 01  
**Revision date** 02-28-2009  
**CAS #** Mixture  
**Synonym(s)** ColorSpan 0900992-301  
**Company identification** Hewlett-Packard Company  
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**Date prepared** Feb 28, 2009  
**MSDS number** 341197

## 2. Hazards Identification

**Emergency overview** Harmful by inhalation and in contact with skin. Irritating to eyes and skin. Allergic reactions are possible.  
**Acute health effects**  
**Skin contact** Contact causes skin irritation. Avoid contact with the skin.  
**Eye contact** Causes eye irritation. Avoid contact with eyes.  
**Ingestion** May be harmful if swallowed.  
**Potential health effects**  
**Routes of exposure** Potential routes of exposure under normal use conditions are skin, eye contact and inhalation.

## 3. Composition / Information on Ingredients

Component/substance	CAS number	% by weight
2-butoxyethylacetate	112-07-2	60-100
2-methoxy-1-methylethylacetate	108-65-6	5-10
Cyclohexanone	108-94-1	5-10
Acetic Acid, Vinyl Ester, Polymer With Chloroethene	9003-22-9	1-2.5

## 4. First Aid Measures

**First aid procedures**  
**Eye contact** In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.  
**Skin contact** In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Get medical attention.  
Wash clothing separately before reuse.  
**Inhalation** In case of accident by inhalation: remove casualty to fresh air and keep at rest. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention immediately.



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## Ingestion

Rinse mouth out with water. Give several glasses of water. Never give anything by mouth to an unconscious person. Do not induce vomiting.  
Get medical attention immediately.

## 5. Fire Fighting Measures

**Flash point and method** 161.6 °F (72 °C) Closed Cup

### Extinguishing media

**Suitable extinguishing media** Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

### Protection of firefighters

**Protective equipment and precautions for firefighters** Firefighters should wear full protective clothing including self contained breathing apparatus. Cool containers with flooding quantities of water until well after fire is out. Avoid runoff into storm sewers and ditches which lead to waterways.

## 6. Accidental Release Measures

**Personal precautions** Avoid inhalation of vapors or mists. Avoid contact with skin. Do not touch or walk through spilled material. Wear appropriate protective equipment and clothing during clean-up.

**Environmental precautions** Do not flush into surface water or sanitary sewer system.

**Methods for cleaning up** Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Clean up in accordance with all applicable regulations. Ventilate the contaminated area. Eliminate ignition sources including sources of electrical, static or frictional sparks.

## 7. Handling and Storage

**Handling** Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product. Use personal protective equipment as required. Use only with adequate ventilation. When using, do not eat, drink or smoke.

**Storage** Keep tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Keep away from heat, sparks and flame. Keep away from oxidizers. Keep out of the reach of children.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH

##### Components

Components	Type	Value
2-butoxyethylacetate (112-07-2)	TWA	20 ppm
Cyclohexanone (108-94-1)	STEL	50 ppm
	TWA	20 ppm

#### U.S. - OSHA

##### Components

Components	Type	Value
Cyclohexanone (108-94-1)	PEL	200 mg/m <sup>3</sup>
		50 ppm
	TWA	100 mg/m <sup>3</sup>
		25 ppm

### Personal protective equipment

**Eye / face protection** Wear safety glasses; chemical goggles (if splashing is possible). Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin protection** Wear appropriate chemical resistant clothing.  
Wear appropriate chemical resistant gloves.

**Respiratory protection** Use personal protective equipment as required.  
Provide adequate ventilation.



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## General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.  
When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.  
Launder contaminated clothing before reuse.

## 9. Physical & Chemical Properties

Color	Cyan
Odor	fruity solvent.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	284 - 392 °F (140 - 200 °C)
Flash point	161.6 °F (72 °C) Closed Cup
Evaporation rate	0.05 - 0.5 BuAc
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	> 1
Specific gravity	0.95 - 0.99 (@25 C)
Relative density	Not available.
Solubility (water)	0.5 g/g
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	900 g/L
Viscosity	5 - 15 cP

## 10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal storage conditions.
Conditions to avoid	Avoid high temperatures.
Incompatible materials	This product may react with strong oxidizing agents. Reacts with air to form peroxides.
Hazardous decomposition products	peroxides.

## 11. Toxicological Information

### Sensitization

#### US ACGIH Threshold Limit Values: Skin designation

Cyclohexanone (108-94-1)

Can be absorbed through the skin.

#### Local effects

Harmful by inhalation and in contact with skin. Contact with skin and eyes may result in irritation. Repeated or prolonged inhalation may cause toxic effects. Inhalation of high vapour concentrations can cause CNS-depression and narcosis.



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## Carcinogenicity

### IARC Monographs on Occupational Exposures to Chemical Agents: Evidence of carcinogenicity in humans

Acetic Acid, Vinyl Ester, Polymer With Chloroethene (9003-22-9) No data.

Cyclohexanone (108-94-1) No data.

### US ACGIH Threshold Limit Values: A3 carcinogen

2-butoxyethylacetate (112-07-2) Group A3 Confirmed animal carcinogen with unknown relevance to humans.

Cyclohexanone (108-94-1) Group A3 Confirmed animal carcinogen with unknown relevance to humans.

**Symptoms and target organs** Major effects of exposure: Skin disorders, Allergic reactions.

### Target Organs (NIOSH)

2-butoxyethylacetate (112-07-2)	Blood
2-butoxyethylacetate (112-07-2)	Central Nervous System
2-butoxyethylacetate (112-07-2)	Eyes
2-butoxyethylacetate (112-07-2)	Hemato system
2-butoxyethylacetate (112-07-2)	Kidneys
2-butoxyethylacetate (112-07-2)	Liver
2-butoxyethylacetate (112-07-2)	Lymphoid system
2-butoxyethylacetate (112-07-2)	Respiratory system
2-butoxyethylacetate (112-07-2)	Skin
Cyclohexanone (108-94-1)	Central Nervous System
Cyclohexanone (108-94-1)	Eyes
Cyclohexanone (108-94-1)	Kidneys
Cyclohexanone (108-94-1)	Liver
Cyclohexanone (108-94-1)	Respiratory system
Cyclohexanone (108-94-1)	Skin

## 12. Ecological Information

<b>Ecotoxicity</b>	No information on ecology is available.
<b>Aquatic toxicity</b>	No data available for this product.
<b>Persistence and degradability</b>	Not available.

## 13. Disposal Considerations

### Waste codes

#### US RCRA Hazardous Waste U List: Reference

Cyclohexanone (108-94-1) U057

**Disposal instructions** Dispose of in compliance with federal, state, and local regulations. Do not allow this material to drain into sewers/water supplies.

## 14. Transport Information

### IATA

Not regulated as dangerous goods.

**General** not regulated

## 15. Regulatory Information

### US federal regulations

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

2-butoxyethylacetate (112-07-2) 1.0 % N230

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

2-butoxyethylacetate (112-07-2) N230 Listed.

#### CERCLA (Superfund) reportable quantity

None



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## Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

## State regulations

### US - New Jersey Community RTK (EHS Survey): Listed substance

2-butoxyethylacetate (112-07-2) Substance no. 3138

### US - New Jersey Community RTK (EHS Survey): Reportable threshold

2-butoxyethylacetate (112-07-2) 500 LBS

### US - Pennsylvania RTK - Hazardous Substances: Listed substance

2-butoxyethylacetate (112-07-2) Listed.

Cyclohexanone (108-94-1) Listed.

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## 16. Other Information

**HMIS® ratings**  
Health: 2  
Flammability: 2  
Physical hazard: 0  
Personal protection: B

**NFPA ratings**  
Health: 2  
Flammability: 2  
Instability: 0

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**Revision** 1

**Disclaimer** This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.



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## Explanation of abbreviations

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds

## Manufacturer information

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